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A CASE STUDY ON ONLINE TICKET BOOKING SYSTEM PROJECT

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A CASE STUDY ON ONLINE TICKET BOOKING SYSTEM

Abstract

Online movie ticket booking system for movies is a web-based program. This application allows users to purchase cinema tickets over the portal. To buy tickets, people must first register or log in. This website's backend is PHP and JavaScript, and the front end is HTML and CSS. All phases of the software development life cycle are efficiently managed in order to design and implement software. On the website, there are two panels: one for administrators and one for customers/users. The admin has the ability to add cinemas, movies, delete, halt execution, and add screens, among other things. The website is simple to navigate and appealing, saving the end user time.

INTRODUCTION

The study's scenario is the online booking system at HOYTS Australia. Customers can utilize the online booking system to make prior reservations, check movie screening times, watch trailers, and read reviews. The business intends to create a web-based gateway for online movie reservations. The online cinema reservation system's goal is to make it possible to book movie tickets over the internet. Customers can view and book programs based on availability. People of all ages can now be seen in movie theaters.

People are more concentrated on their work than they have been in the past. People, on the other hand, spend their leisure time watching movies. When people start working, they don't want to waste time waiting in lines to buy movie tickets. We came up with the concept of developing a web-based movie ticketing system because of this. This is a dynamic website where visitors may create a list of movies they want to see, as well as learn about which movies are presented in which rooms, ticket costs, and others relevant info. Consumers (i.e. end users and admin which is responsible for managing data) may immediately feel the benefits of our technology by browsing and using the web protocol. This technology is also beneficial to theater owners since it allows them to easily reach out to clients and grow their business by using an interactive GUI (graphical user interface).

The online movie ticketing system has the following features:

- a) User registration and login
- b) Simply select the movie, show time, and theater name
- c) Screenings, upcoming movie trailers, and Comments and payment gateway
- d) Administrators have access to the dashboard, which allows them to create, delete and videos.

3. SYSTEM ARCHITECTURE

An architecture is "the fundamental organization, which comprises the components, relationships between themselves and the surroundings and the rules that govern its development and design. The system architecture process is where concepts are established which constitute the backbone of the current system. It is a model concept which outlines how the planned or an existing system is structured and behaved. The model could comprise technical foundation, user demands and a list of components of the system (hardware and software).

During the system architecture process, the major decisions are:

- The new system's characteristics
- The architectural style
- Used kind of software (custom or off-the-shelf)
- Technology types employed
- How to deploy the system

3.1. Business process modeling

The business method model is a graphic representation of a business procedure or a firm that is used to describe prospective improvements. Data flow diagrams, graphic flow diagrams, and so forth. They're commonly utilized to restore and improve business operations. Business process modeling is primarily used to enhance, analyze, recover, and automate an organization's current processes. The complete system's core process model, as depicted in the exhibited diagram of an actual business process, has been implemented. This model demonstrates the existence of two users: i) users (that is, movie viewers); ii) administrators (that is, administrators) (that is, developers). The user can log in and select a movie to book a show. The administrator can fully control the system and access all its functions.

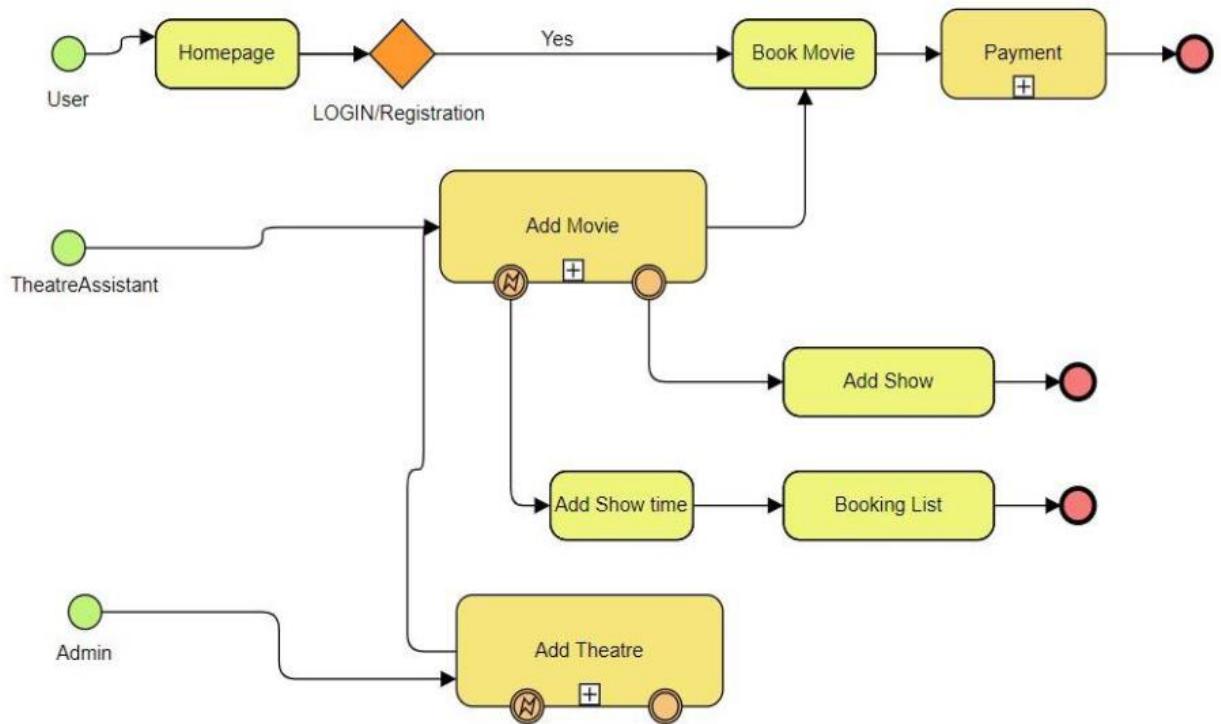


Figure 1. Business process model for the system

3.2. Use case Diagram

Use-case diagrams are to show how a task's dynamic behavior changes over time. Use case diagrams show how participants and the system work together to perform a single job. Figure 2 depicts the use case diagram for our system. There are three participants in this use case: administrators, registered users, and users whose principal roles are mentioned. The graph stream shows all of a registered user's activities.

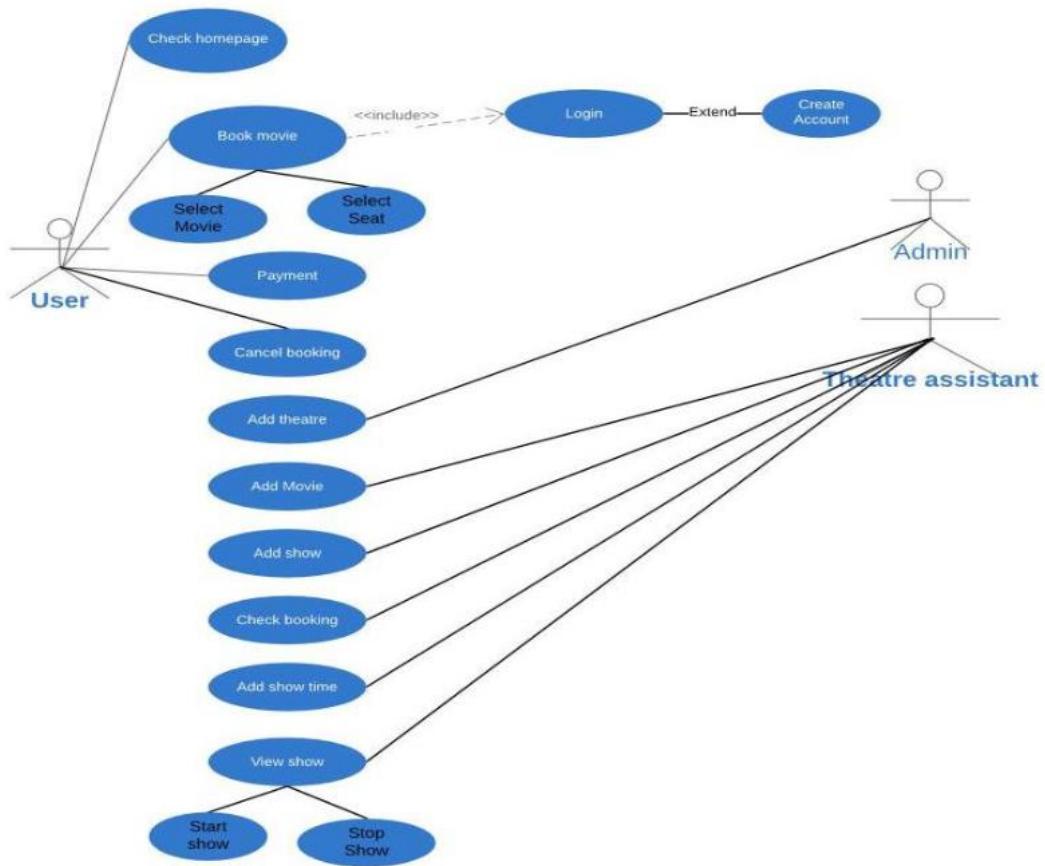


Figure 2. Use case diagram for the system

3.3. Logical data model

A legitimate information model is a portrayal of a data set framework for a specific issue area. The legitimate information model is a physical or reasonable information model that utilizes a few social tables and sections just as item situated classes to depict it. The sensible information model essentially gives a calculated outline of the information structure, not the actual execution particulars of the data set framework. The UML class outline addresses our data set's consistent information model.

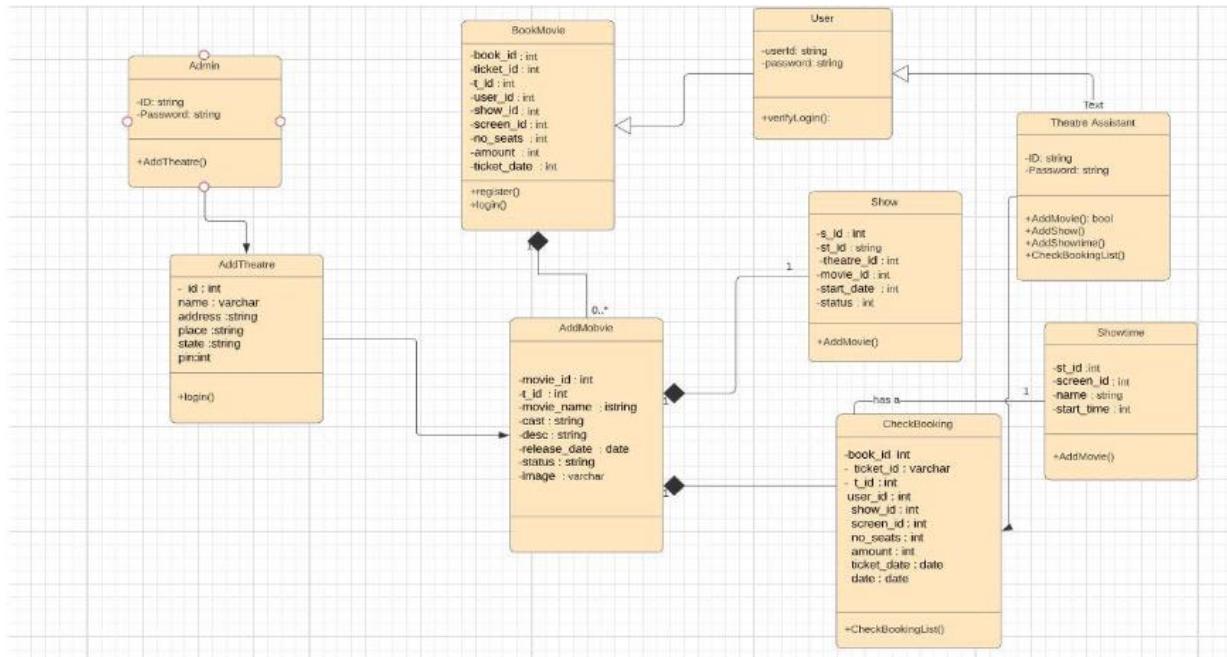


Figure 4. Class diagram of the database

GANNT CHART

The Gantt chart is a time-based visual representation of the task. They contain vital information like as who is in charge of what, as well as the project's duration and overlap. The system's Gantt chart is depicted in the diagram below:



FUNCTIONAL/NON-FUNCTIONAL REQUIREMENTS

The functional requirements of the system are:

- All users and administrators necessity be capable to register in the structure of system by giving the appropriate information.
- Double-check that you wish to log in to the user by entering valid information.
- The system must be capable of booking a movie ticket on a specific date.
- The system must allow the user to compare ticket prices and wait times. • The system must allow the user to watch movies by category.
- To add, amend, or delete a cinema, the system must be administered.
- Manage the films by adding, editing, and deleting them.
- Administrators can be added, edited, or deleted.
- The system administrator must be capable to display the number of recorded consumers.

System's non-functional needs are as follows:

- Safety and security

A high-level system with the system must guarantee safety and data integrity. Only company employees have access to the systems protected corporate and user pages. Users with valid passwords and user names can only be accessed.

- Availability: This system is available at all times, twenty-four hours a day, seven days a week. In the event of a catastrophic system failure, the system must be back up and running within 1 to 2 business days, ensuring that the business process is not disrupted.

SOFTWARE MANAGEMENT

This section explains the system's front-end and back-end design in a clear and thorough manner. For front-end and back-end development process, a variety of tools has been used.

4.1. Front-end design

The appealing Front-End design never fails to impress website visitors. The user's user is always influenced by the front flint and its content. HTML (hypertext markup language), JavaScript, CSS (waterfall style sheet), and other technologies are required for our frontend design. HTML is used to build and design documents for web browsers. JavaScript and CSS Support HTML to create a full-fledged website that is impressive, personalized, and advanced. The skeleton of any site is HTML and CSS, and without CSS, the site is basic or free text. JavaScript is a dynamic prearranging language that might be utilized to give embellishments to sites like rollovers, organizations, and different pictures. Two fundamental rules for ubiquity, resilience, effectiveness, and sites to evaluate usefulness are "connection plan" and "plan of client experience." The plan of the interface and the plan of the client experience are inseparably connected. All things considered, the objective of client experience configuration is to make a positive client experience, and most of that experience includes cooperation between the client and the item. Be that as it may, the client's commitment and experience don't impeccably reflect a similar marvel. An exchange fashioner centers around the client's connection with the item, fully intent on working on the client's intuitive experience. The time of discourse, for client experience originators, is important for an excursion that the client takes while cooperating with the item. Experiential learning All client represents all client arranged records, for example, client research, incorporate record plan, visual plan, association plan, data engineering, ease of use, and content technique. Clients can find out with regards to the latest movies. The client experience shows the site's landing page, yet the site's landing page is introduced. For the administration of film tickets, the framework was made freely. On the site, you might discover all that you need to think about the film. Clients can buy tickets and

make installments in a fast and helpful way. There are various modules, including "Start," "Buy ticket," and "Buy ticket," just as "Login," which contain route bars at the highest point of pages. The beginning page has been added.

The film that is presently playing in the various theaters of the module" is currently presented ", the visitor can see. The following movie list can be found in the "Soon" category. Another significant component is the "trailer." Viewers can see short film snippets on our website. The item will be reprogrammed twice a week by the article by the theatrical assistant "Now Show." To see the movie's data, such as the release date and the director's name, click on the movie Viewer movie icon or the title. A website's search box can be used to look up movie titles, theater names, and other film information on your system. The day on which the film will be shown can be found out. The trailer can be viewed without logging in. Then you can quickly find movies and theaters at your preferred cost. The website's most noticeable features are the book movie buying options. Unlike other Japanese websites, ours allows you to purchase tickets from a variety of theaters. The administrator then evaluates the ticket and emails the user with digital tickets. Payment gateways are implemented using PHP, which is a very safe and helpful language (hypertext preprocessor).

4.2. Back-end design

The worker, application, and information base are the three parts of the back end. When clients present the entirety of their data on our site, like their name, theater name, number of seats etc, the web application saves the information in a data set that was recently based on the worker. For back-end execution, we utilize the accompanying center parts. Eminent Text is a cross-stage source code supervisor that incorporates a Python API (application programming interface). It accompanies worked in help for an assortment of programming and markup dialects.

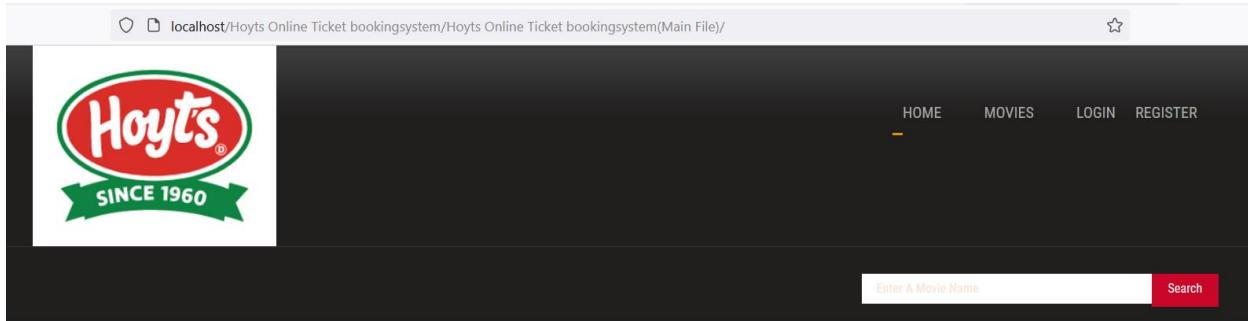
5. SYSTEM TESTING AND DATA ANALYSIS

We utilized a few strategies to test and assess our sites after execution. At first, we tried our product utilizing "Discovery Testing" technique. Discovery testing, otherwise called conduct testing, is a product testing procedure in which the inward construction/plan/execution of the thing being tried is

not known to the analyzer. Modules, which are regularly produced by the local area and kept up with under free programming licenses, permit administrator to add highlights. This proofreader is utilized to help PHP, JavaScript, HTML, CSS, and different dialects. As a back-end arrangement, we utilize the XAMPP stage. Cross Platform (X), Apache (A), MySQL (M), PHP (P), and Perl (P) are the abbreviations for Cross Platform (X), Apache (A), MySQL (M), PHP (P), and Perl (P) (P). It's a lightweight Apache conveyance for designers who need to set

up nearby web workers for testing. The venture is genuinely easy to carry out on account of the XAMPP stage. Information base: For our site's data set, we use php My Admin. This device is easy to utilize and comprehend. phpMyAdmin is a free and open source MySQL and Maria DB the executives application. On the worker side, we use the PHP prearranging language a great deal since it has a ton of intricate components and can uphold an assortment of information bases.

Screenshot



Upcoming Movies



Black Widow
Cast :Scarlett Johansson, Florence Pugh, David Harbour, Rachel Weisz
Release Date :2021-07-09

At birth the Black Widow (aka Natasha Romanova) is given to the KGB, which grooms her to become its ultimate operative.



Shang-Chi and the Legend of the Ten Rings
Cast :Simu Liu, Awkwafina, Tony Leung, Fala Chen, Michelle Yeoh
Release Date :2021-09-14

Shang-Chi is a master of numerous unarmed and weaponry-based wushu

Movie Trailers



Outside the Wire



Godzilla vs. Kong

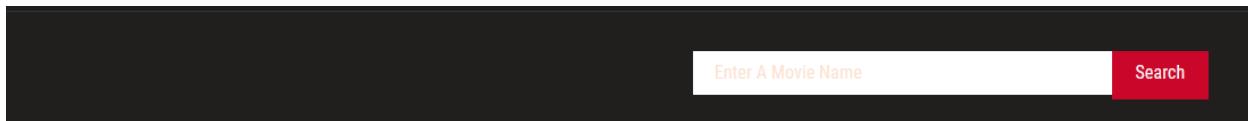
Films in Theaters



Cherry
Release Date: 2021-03-01
Cast: Tom Holland, Ciara Bravo, Harry Holland, Kelli Berglund
Description: Cherry (Tom Holland) drifts from college dropout to army medic in Iraq-anchored only by his one true love, Emily (Ciara Bravo). But after returning from the war with PTSD, his life spirals into drugs.



The Invisible Man
Release Date: 2020-03-04
Cast: Elisabeth Moss, Oliver Jackson-Cohen, Aldis Hodge, Storm Reid
Description: Cecilia's abusive ex



Upcoming Movies



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Release Date: 2021-09-14

Shang-Chi is a master of numerous unarmed and weaponry-based wushu styles, including the use of the gun, nunchaku, and jian.



The Eternals
Cast: Richard Madden, Salma Hayek, Angelina Jolie, Kit Harington
Release Date: 2021-11-04

The saga of the eternals, a race of immortal beings who lived on earth and shaped its history and civilizations.

Movie Trailers



Outside the Wire



Godzilla vs. Kong



Justice League

Films in Theaters



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Cast: Tom Holland, Ciara Bravo, Harry Holland, Kelli Berglund
Description: Cherry (Tom Holland) drifts from college dropout to army medic in Iraq-anchored only by his one true love, Emily (Ciara Bravo). But after returning from the war with PTSD, his life spirals into drugs.



The Invisible Man
Release Date: 2020-03-04
Cast: Elisabeth Moss, Oliver Jackson-Cohen, Aldis Hodge, Storm Reid
Description: Cecilia's abusive ex-boyfriend fakes his death and becomes invisible to stalk and torment her. She begins experiencing strange events and decides to hunt down the truth on her own.



Justice League
Release Date: 2021-03-22
Cast: Ben Affleck, Henry Cavill, Ezra Miller
Description: This is a demo description for the movie ZSL.

Outside the Wire

Release Date: 2021-01-28
Cast: Anthony Mackie, Damson Idris, Emily Beecham
Description: In the near future, a drone pilot sent into a war zone finds himself paired up with a top-secret android officer on a mission to stop a nuclear

(NOW SHOWING)



The Invisible Man

Cast: Elisabeth Moss, Oliver Jackson-Cohen, Aldis Hodge, Storm Reid



Cherry

Cast: Tom Holland, Ciara Bravo, Harry Holland, Kelli Berglund



Godzilla vs. Kong

Cast: Millie Bobby Brown, Alexander Skarsgård, Rebecca Hall



Outside the Wire

Cast: Anthony Mackie, Damson Idris, Emily Beecham

Films in Theaters



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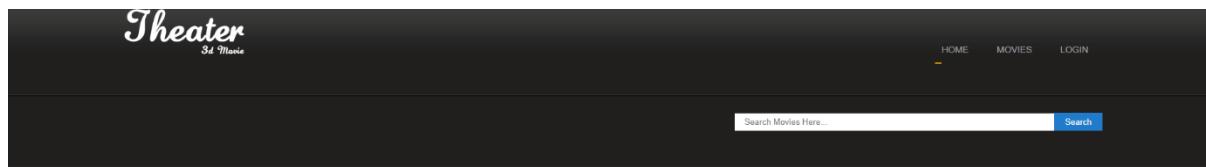
User can watch movie trailer and book show after login/register .

The screenshot shows the 'Movies List' page under the 'Admin' section. On the left, there's a sidebar with a user icon and the text 'Admin' followed by 'Online'. Below this are navigation links: 'Home', 'Add Theatre', and 'Add Movie Now'. The main content area has a header 'Movies List' and a table with the following data:

II	Nakshat	
II	Comrade In America	
II	Angrezi Diaries	
II	Gotha	
II	Ramante Edification	

Admin interface of movie list, admin can edit delete and add new movie on list.

The screenshot shows the 'Theatre Assistant' login page. At the top, it says 'Theatre Assistant' and 'Admin'. Below this is a sign-in form with the placeholder text 'Sign in to start your session'. It contains two input fields: 'Email' and 'Password', both with their respective icons. Below the fields is a 'Login' button.



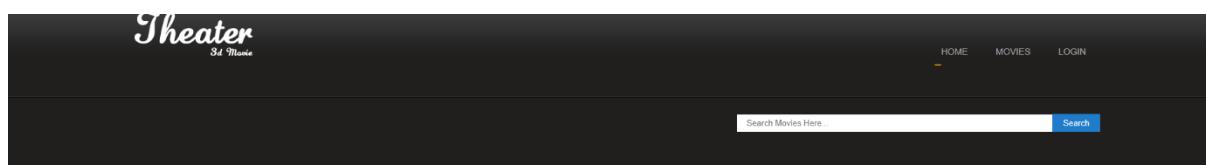
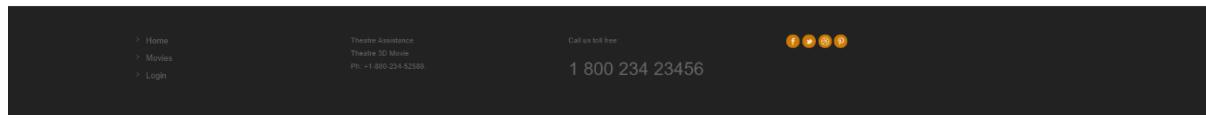
Login

Sign in to start your session

Email

Password

New Here? [Register](#)



Register

Name

Age

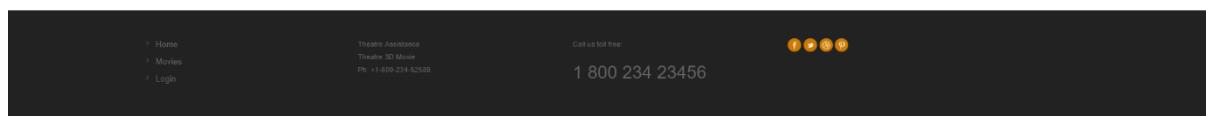
Selected Gender

Mobile Number

Email

Password

Re-enter Password



No	Show Time	Screen	Movie
1	Screen 1	10:00:00(Noon)	Sakhav
2	Screen 1	14:00:00(Matinee)	Sakhav
3	Screen 1	18:00:00(Fire)	Sakhav
4	Screen 1	21:00:00(Second)	Sakhav
5	Screen 2	19:00:00(Noon)	Comrade In America
6	Screen 2	14:00:00(Matinee)	Comrade In America
7	Screen 2	18:00:00(Fire)	Comrade In America
8	Screen 2	21:00:00(Second)	Comrade In America

Teamwork

During the development of this project team, each part of the development required teamwork is very crucial for this task, and our team works best. In short, project's success begins with determining what type of team want to assemble. Whether it should be composed of professionals with a strong understanding of their area, a multifaceted group of generalists with expertise in several fields or a combination of the two. Then must measure your team's size, keeping in mind the implications of choice. Once team is structured, build the duties and expectations of each software development team. But remember that a successful team found clear routes of communication and efficient working styles.

6. CONCLUSION AND SCOPE

The paper covers various needs analysis, evaluation, and system design for HOYTS Australia, which is interested in establishing an online ticketing system that allows users to order tickets directly from the website. Customers will be able to browse for movies by genre, read movie details, and make reservations via the system. They can reserve movie tickets by entering the movie's date and time. Similarly, particular movie ratings and reviews can be offered. The ticket buying system is a website that allows consumers or users to effortlessly purchase movie tickets from a range of theaters. Although numerous mobile applications offer movie tickets, they are primarily utilized for other purposes. As a result, users may feel uneasy while exploring these sites/apps, making it harder to purchase tickets. Additionally, theater owners

who do not have access to a digital platform for ticket sales will become members of our service and will be able to use the digital platform. In the future, I'd like to create an application for both Android and iOS that allows users to purchase movie tickets. Overall, the system includes detailed specifications for all of the needs needed to construct an online movie ticketing system efficiently and effectively.

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